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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,595	04/28/2000	Madeleine Prigent	Q58982	3132

7590 12/20/2002  
Sughrue Mion Zinn Macpeak & Seas PLLC  
2100 Pennsylvania Avenue  
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Washington, DC 20037-3213

EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 12/20/2002

16

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/559,595

Applicant(s)

PRIGENT ET AL

Examiner

Jill M Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 13, 2002 has been entered.

### ***Response to Amendment***

The rejection of claims 1, 3-7, and 9-16 under 35 U.S.C. 103(a) as being unpatentable over Dickinson, 5,173,960 in view of Pedlow 4,018,983 and 4,018,962 is withdrawn in view of applicants arguments.

### ***Claim Objections***

2. Claims 1 and 9-11 are objected to because of the following informalities: In particular, it appears that a portion of the claim limitations has been omitted. Appropriate correction is required.

Claims 9-11 are objected to because these claims set forth duplicate embodiments depending upon the selected organic compound. For example, claims 9 and 11 both set forth that the organic compound can be polyester or polyurethane. Since claim 11 is not further limiting of claim 9, these claims are essentially duplicates when the organic compound is either polyester or polyurethane.

### ***Claim Rejections - 35 USC § 112***

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, claim 3 is indefinite because it is not clear whether "phyllosilicate" is a further definition of a silicate of layered structure or a limiting feature separate from the silicate of layered structure.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-7 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson 5,173,960 in view of Smith et al, 6,190,775 B1 (Smith).

Dickinson teaches a cable comprising at least one optical fiber and at least one covering layer, as required by claims 12-14. In addition, he teaches that his cable has a barrier comprised of an organic base resin and an additive such as mica, which can be used in the form of a tape or coextruded with the jacketing composition. Dickinson is silent as to the specific teaching of treating the inorganic compound to allow the organic compound to be inserted between the layers of the inorganic compound.

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Smith teaches a flexible insulating tape comprising a mica or mica-like matrix with insulating resin and intercalated metal ions between the matrix where the resin and ions are intimately disposed next to the mica. In addition, Smith teaches that intercalated nanoclays can be added to the mica. The nanoclay is an inorganic compound in platelet form such as montmorillonite and is treated to intercalate (expand or open) spacing between its platelets. An oligomer is inserted or disposed within (intercalated) into the opened compound and then interacted with a suitable resinous composition that can polymerize with itself and also with the oligomer disposed within the material. This composition is subsequently impregnated into mica paper or mica tape, and upon heating, the impregnated composition will crosslink forming polymers around and within the intercalated material. The suitable resins can be epoxy resins and polyesters. See columns 7 and 8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cable of Dickinson by using as the barrier, mica tape , as taught by Smith to fireproof the cable as well as provide good electrical insulation and high dielectric strength and excellent thermal stability.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 3-7, and 9-16 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

### ***Conclusion***

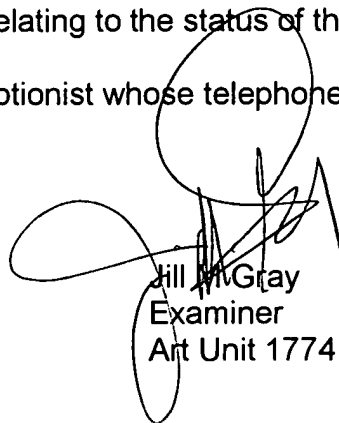
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8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M Gray whose telephone number is 703.308.2381. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.5408 for regular communications and 703.305.3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.



Jill M Gray  
Examiner  
Art Unit 1774

jmg  
December 11, 2002